

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

LISTING OF CLAIMS:

1. (Currently Amended) A medical pump ~~monitor~~ monitoring system using ~~a plurality of medical pumps to administer~~ which administers medical fluids and the like for a patient using a plurality of medical pumps, and ~~monitoring monitors~~ flows of delivered fluids and alarm information of the medical pumps by wired ~~through cable~~ communication and/or wireless communication, the medical pump monitoring system comprising:

a control unit;

a display unit;

an wherein infusion circuitry creating means unit for ~~setting/changing~~ creating infusion circuitry data defining the connection conditions of infusion lines from the plurality of medical pumps, and administration passes and/or administration positions for the patient; ~~is provided~~ [[,]]

said control unit controlling said display unit and ~~it is made possible~~ to display the created infusion circuitry data with information from the plurality of medical pumps connected according to the created infusion circuitry data, in a pump information display area ~~created in the infusion circuitry creating means~~ on a monitor screen of said display unit according to ~~by operations by~~ from an operator of the medical pump ~~monitor~~ monitoring system; and

the pump information display area including,

an area for displaying respective operation conditions of different ones of the medical pumps in a visually distinguishing manner, wherein at least a normal operation condition is visually indicated in a first manner, an alarm condition is indicated in a second manner visually distinguishable from the first manner, an interruption of the administration operation is indicated in a third manner visually distinguishable from the first and second manners, and a condition where the medical pump is not connected is indicated in a fourth manner visually distinguishable from the first, second and third manners,

areas for displaying respective flow amounts of the medical pumps,
areas for displaying respective alarm information for medical pumps,
areas for displaying respective administered drug information for
medical pumps, and

an area for displaying the infusion circuitry for delivery medical fluids to the patient according to the created infusion circuitry data.

2. (Currently Amended) The pump ~~monitor~~ monitoring system according to claim 1, further comprising,

~~wherein a reading means unit~~ for reading an infusion circuitry diagram,
including such as a handwritten diagram, in the medical pump ~~monitor system is~~
~~provided, and~~ monitoring system,

wherein, it is made possible to make a choice by operator's operations on whether the infusion circuitry information data to be displayed on the monitor screen during operation of the medical pump ~~monitor~~ monitoring system is information selected from the data created using by the infusion circuitry creating means or

~~information created using said infusion circuitry diagram~~ unit and the data read by reading means unit, according to the operation from the operator.

3. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim 1,

wherein said infusion circuitry creating ~~means~~ unit displays a ~~sketch~~ diagram of the patient ~~with respect to determination of~~ to receive the administration position for the patient, ~~and inputting in the medical pump monitor system any position information in the sketch, thereby making a determination as administration closest to the inputted position information~~ from the operator.

4. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim 1, wherein said infusion circuitry creating ~~means~~ unit further comprises ~~determining means for making a check for~~ a determination unit for determining whether or not the infusion line ~~[[not]]~~ is suited to a practical method for transfusion.

5. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim 1, wherein said ~~fluid delivery circuitry creation means can select~~ infusion circuitry creating unit selects an optimal pump arrangement pattern from a plurality of pump arrangement patterns registered in advance.

6. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim ~~[[1]]~~ 4, wherein the ~~determining means makes a determination on~~

~~existence of~~ said determination unit determines whether or not a loop-shaped line
line in the infusion line exists, and if so, gives an alarm to the operator if there exist a
~~loop-shaped line.~~

7. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim ~~[[1]]~~ 4, wherein ~~the determining means~~ said determination unit determines whether or not two or more of the infusion lines ~~[[run]]~~ are directly from the connected to a single medical pump, and if so, gives an alarm to the operator if ~~two or more of infusion lines run directly therefrom.~~

8. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim ~~[[1]]~~ 4, wherein ~~the determining means~~ said determination unit determines whether or not the infusion line is ended at some midpoint without reaching the patient, and if so, gives an alarm to the operator ~~of the medical pump monitor system if the infusion line is ended at some midpoint.~~

9. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim ~~[[1]]~~ 4, wherein ~~the determining means~~ said determination unit determines whether or not the infusion line is ~~necessarily~~ formed towards at least one position of the patient from the medical pump, and if so, gives an alarm to the operator if ~~the infusion line is not necessarily formed towards at least one position of the patient from the medical pump.~~

10. (Currently Amended) The medical pump ~~monitor~~ monitoring system

according to claim ~~[[1]]~~ 4, wherein ~~the determining means~~ said determination unit determines whether or not the infusion line inserted into a specified portion of the patient is inserted into the patient again, and if so, gives an alarm to the operator if ~~the infusion line inserted into a specified portion of the patient is inserted into the patient again.~~

11. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim ~~[[1]]~~ 4, wherein ~~the determining means~~ said determination unit determines whether or not the infusion line from the operating medical pump is not connected to the patient, and if so, gives an alarm to the operator ~~if the infusion line from the operating medical pump is not connected to the patient.~~

12. (Currently Amended) The medical pump ~~monitor~~ monitoring system according to claim 1, wherein the monitor screen ~~can display~~ displays thereon real-time states or trends in arbitrary time ranges for at least any one of the amount of water, the urinary volume and the amount of electrolytes.

13. (Withdrawn - Currently Amended) A controlling method for a medical pump ~~monitor~~ monitoring system using a plurality of medical pumps to administer medical fluids and the like for a patient, monitoring flows of delivered fluids and alarm information of the medical pumps through cable communication and/or wireless communication, comprising:

an infusion circuitry creating step of setting/changing the connection conditions of infusion lines from the plurality of medical pumps, and administration passes and/or administration positions for the patient; and

a step of making it possible to display infusion circuitry data created in the infusion circuitry creating means on a monitor screen by operations by an operator of the medical pump ~~monitor~~ monitoring system.

14. (Withdrawn) A computer readable memory storing therein program codes for controlling a medical pump monitor system using a plurality of medical pumps to administer medical fluids and the like for a patient, monitoring flows of delivered fluids and alarm information of the medical pumps through cable communication and/or wireless communication, comprising program codes of: an infusion circuitry creating step of setting/changing the connection conditions of infusion lines from the plurality of medical pumps, and administration passes and/or administration positions for the patient; and a step of making it possible to display infusion circuitry data created in the infusion circuitry creating means on a monitor screen by operations by an operator of the medical pump monitor system.

15. - 22. (Canceled)

23. (New) The medical pump monitoring system according to claim 1, wherein the respective operation conditions of different ones of the medical pumps are displayed in different colors.

24. (New) The medical pump monitoring system according to claim 23, wherein at least the normal operation condition is displayed in green, the alarm condition is displayed in red, the interruption of the administration operation is displayed in yellow, and the condition where the medical pump is not connected is displayed in grey.